

# ALAN MATHEW VARGHESE

Alappuzha, Kerala

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[Website](#) ♦ [LinkedIn](#) ♦ [GitHub](#)

## OBJECTIVE

To leverage my skills in web development and AI technologies to create innovative solutions that address real-world challenges. I am committed to contributing to impactful projects and gaining hands-on experience in a collaborative environment. I aim to apply my knowledge in developing robust web applications and intelligent systems while working with experienced professionals to further enhance my technical skills and problem-solving abilities.

## EDUCATION

<b>TKM College of Engineering Kollam, Kerala, India</b>	2022 - 2026
<ul style="list-style-type: none"><li>B.Tech in Computer Science and Engineering. CGPA: 8.27</li><li>Undergraduate Coursework: DSA, Operating System, Discrete Mathematics, Database.</li></ul>	
<b>Christ Central School Thiruvalla, Kerala, India</b>	2020 - 2022
<ul style="list-style-type: none"><li>CBSE 12<sup>th</sup> grade in Computer Science (94%).</li><li>Coursework: Fundamentals of programming, Python.</li></ul>	
<b>Mathews Mar Athanasius Residential School Chengannur, Kerala, India</b>	2008 - 2020
<ul style="list-style-type: none"><li>ICSE 10<sup>th</sup> grade (97%).</li></ul>	

## PROJECTS

- Balloon Pop Mania**  
For our college fest, I created a hand-tracking balloon-popping game using **Pygame** and **OpenCV**. It showcased innovative applications of computer vision, allowing players to pop balloons with hand movements. The project was well-received and engaged participants, highlighting the fun and potential of combining different technologies. ([GitHub link](#))
- Car Detection Model**  
A Car Detection and Counting System using **OpenCV** to demonstrate the practical applications of computer vision in surveillance. The project aimed to automate traffic monitoring by detecting and counting cars crossing a line in a video feed. The outcome was a successful demonstration of how technology can be used for efficient traffic management, with its real-world relevance and technical execution. ([GitHub link](#))
- Flappy Bird AI**  
AI for the classic Flappy Bird game using **Pygame** and **NEAT** by exploring the capabilities of neural networks and genetic algorithms. The goal was to demonstrate how AI can learn and improve its performance by evolving over generations. The outcome was a successful demonstration of machine learning in action, showcasing the AI's ability to autonomously learn and adapt to the game. ([GitHub link](#))

## TECHNOLOGIES AND SKILLS

- Python, C++, C, Java, MySQL, HTML, CSS, JavaScript
- Figma, Photoshop, Blender, After Effects
- Leadership, Problem Solving, Creative Thinking, Independent Learner

## CERTIFICATIONS

- Participated in Kerala's biggest **web3 hackathon** conducted by EmergX in association with **Kerala Blockchain Academy**.
- Career Essentials in **Software Development** by Microsoft and LinkedIn.
- Career Essentials in **Generative AI** by Microsoft and LinkedIn.
- Self Driving Robot** workshop held at College of Engineering, Chengannur.
- Data Science** workshop as part of PyWeek held at TKM College of Engineering.

## LEADERSHIPS

- Student Placement Coordinator** of CSE dept, TKM College of Engineering (2024)
- Design Head** in Executive Committee of CSI, TKM College of Engineering (2023-2024)
- Design Team** in Executive Committee of Coding Club, TKM College of Engineering (2023-2024)
- Design Team** in Executive Committee of ACM, TKM College of Engineering (2023-2024)